

Mattingly Products Company, Inc.)	Departmental
Somerset County)	Findings of Fact and Order
North Anson, Maine)	Air Emission License
A-123-71-K-R/A (SM))	

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Mattingly Products Company, (MPC) located in Anson, Maine, has applied to renew their Air Emission License, permitting the operation of emission sources associated with their asphalt batch plant, concrete batch plant and crushed stone operations.

MPC has also requested an amendment to replace two rock crushers with two new rock crushers.

B. Emission Equipment

Asphalt Plant:

<u>Equipment</u>	<u>Process Rate (tons/hour)</u>	<u>Design Capacity Firing Rate</u>	<u>Control Devices</u>	<u>Date of Manufacture</u>
Kiln	200	55 MMBtu/hr, 392.86 gal/hr, diesel fuel @ 0.05% sulfur	Baghouse	1976

Concrete Plant

<u>Equipment</u>	<u>Production Rate (cubic yards/hour)</u>	<u>Control Devices</u>
Concrete Batch Plant	50	Baghouse

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Rock Crushers:

<u>Designation</u>	<u>Process Rate (tons/hour)</u>	<u>Control Device</u>	<u>Date of Manufacture</u>
RC #1	250	Spray Nozzles	1928
RC #2*	200	Spray Nozzles	1992
RC #3*	200	Spray Nozzles	2005

*Designates new equipment

Diesel Units:

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>
Generator #1	0.55 MMBtu/hr	4.0 gal/hr	100 kW
Generator #2	3.43 MMBtu/hr	25.0 gal/hr	350 kW
Generator #3	4.11 MMBtu/hr	30.0 gal/hr	650 kW

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. This application is determined to be a synthetic minor license renewal, with a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Asphalt Plant

The asphalt batch plant was manufactured by Cedar Rapids in 1976 and is subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities. Mattingly Products Company Inc. shall comply with the particulate matter and opacity performance testing requirements of 40 CFR 60 Subpart I 60.93 to demonstrate compliance with the particulate matter and opacity standards no later than October 1st 2006. The asphalt plant has a maximum design heat input capacity of 55 MMBtu/hr and is capable of producing 200 ton per hour (tons/hr) of asphalt. The asphalt batch plant makes use of a baghouse for particulate matter emissions control.

The performance of the baghouse shall be constantly monitored by either one of the following at all times the asphalt batch plant is in operation.

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Mattingly Products Company, Inc. shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.

A summary of the BPT analysis for the Asphalt Plant is as follows.

1. BPT for PM is emissions not to exceed 0.03 gr/dscf. PM₁₀ emissions are derived from PM emissions.
2. MEDEP Chapter 106 regulates fuel sulfur content. However, the facility wide use of diesel fuel with a sulfur content not to exceed 0.05% is more stringent and shall be considered BPT.
3. NO_x, CO and VOC emission limits are based upon AP-42 data dated 12/00.
4. Visible Emissions for the Asphalt Batch Plant are limited to no greater than 20% opacity on a 6-minute block average, except for no more than two (2), six (6) minute block averages in a continuous 3-hour period.

C. Concrete Batch Plant

To meet the requirements of BPT for control of particulate matter (PM) emissions from the cement silo, particulate emissions shall be vented through a baghouse maintained for 99% removal efficiency. Visible emissions from the cement silo baghouse is limited to no greater than 10% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. The facility shall take corrective action if visible emissions from the baghouses exceed 5% opacity.

All components of the concrete batch plant shall be maintained so as to prevent PM leaks. Visible emissions from concrete batching operations shall not exceed 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period.

D. Rock Crushers

RC #1, RC #2, and RC #3 are non-portable units with rated capacities of 250, 200 and 200 tons/hour respectively. RC #1, RC #2, and RC #3 are subject to NSPS Subpart OOO for Nonmetallic Mineral Processing Plants manufactured or modified after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of BPT for RC #1, and BACT for RC #2 and RC #3, for control of particulate matter (PM) emissions, Mattingly Products Company, Inc. shall maintain water sprays on the rock crushers and operate as needed to control visible emissions. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

E. Diesel Units

Mattingly Products, Inc. operates three diesel units designated Generators #1, #2, and #3. These units are rated at 0.55, 3.43, and 4.11 MMBtu/hr respectively.

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Chapter 106 regulates fuel sulfur content, however the use of diesel fuel with a sulfur content not to exceed 0.05% by weight is more stringent and shall be considered BPT.
2. A BPT emission factor of 0.12 lb/MMBtu shall be used for Generator #1. MEDEP Chapter 103 regulates PM emission limits for diesel units larger than 3 MMBtu/hr (Generators #2 and #3). For all Generators, the PM₁₀ limits are derived from the PM limits.
3. NO_x, CO and VOC emission limits are based upon AP-42 data dated 10/96.

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4. Opacity from Generators #1, #2 and #3 shall each not exceed 20% on a six (6) minute block average basis, except for no more than two (2), six (6) minute block averages in a 3-hour period.

F. Stock Piles and Roadways

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

G. General Process Emissions

Visible emissions from a general process (including conveyor belts) shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

H. Facility Emissions

1. The asphalt plant shall be limited 130,000 gal of diesel fuel with a sulfur content not to exceed 0.05%, on a 12 month rolling total.
2. Generators #1, #2 and #3 shall be limited to a combined 20,000 gal of diesel fuel with a sulfur content not to exceed 0.05%, on a 12 month rolling total.
3. Mattingly Products, Inc. shall be restricted to the following annual emissions, based on a calendar year:

Total Licensed Annual Emissions for the Facility

(used to calculate the annual license fee)

Tons/Year

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Ashpalt Plant	1.14	1.14	0.46	3.97	13.24	0.27
Generators #1, #2 and #3	0.16	0.16	0.07	6.04	1.30	0.48
Total	1.30	1.30	0.53	10.01	14.54	0.75

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-123-71-K-R/A, subject to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions. [MEDEP Chapter 115]
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive

dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]

- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. § 353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 2. pursuant to any other requirement of this license to perform stack testing.

- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[MEDEP Chapter 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
- B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[MEDEP Chapter 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.

[MEDEP Chapter 115]

- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

SPECIFIC CONDITIONS

(16) **Asphalt Plant**

- A. Emissions from the hot mix asphalt plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks. [MEDEP Chapter 115, BPT]
- B. The performance of the baghouse shall be constantly monitored by either one of the following at all times the asphalt plant is operating [MEDEP Chapter 115, BPT]:
 - 1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Mattingly Products, Inc, shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
 - 2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt plant is operating with insufficient control and corrective action shall be taken immediately.
- C. To document maintenance of the baghouse, Mattingly Products, Inc. shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the asphalt plant location. [MEDEP Chapter 115, BPT]
- D. Opacity from the baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]
- E. General process emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101]
- F. The asphalt plant shall be limited to firing 130,000 gal of diesel fuel with a sulfur content not to exceed 0.05% on a 12 month rolling total. Records from the supplier documenting quantity and sulfur content shall be kept for compliance purposes. [MEDEP Chapter 115, BPT]

- G. Emissions from the baghouse shall not exceed the following [MEDEP Chapter 115, BPT]:

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	6.90
PM ₁₀	-	6.90
SO ₂	-	2.77
NO _x	-	24.00
CO	-	80.00
VOC	-	1.64

- H. Mattingly Products, Inc. may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Department at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil. [MEDEP Chapter 115, BPT]
- I. Mattingly Products, Inc. shall not process soils which are classified as hazardous waste or which have unknown contaminants. [MEDEP Chapter 115, BPT]
- J. When processing contaminated soils, Mattingly Products, Inc. shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Mattingly Products, Inc. shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [MEDEP Chapter 115, BPT]
- K. The Hot Mix Asphalt Plant is subject to 40 CFR Part 60 Subparts A, and I and Mattingly Products, Inc. shall comply with the notification and recordkeeping requirements of 40 CFR Part 60.7.
- L. Mattingly Products Company Inc. shall comply with the particulate matter and opacity performance testing requirements of 40 CFR 60 Subpart I 60.93 to demonstrate compliance with the particulate matter and opacity standards no later than October 1st 2006.

(17) **Concrete Batch Plant**

- A. Particulate emissions from the cement silo shall be vented through a baghouse and all components of the batch plant shall be maintained so as to prevent PM leaks. [MEDEP Chapter 115, BPT]
- B. To document maintenance of the cement silo baghouse, the licensee shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the concrete batch plant location. [MEDEP Chapter 115, BPT]
- C. Opacity from the cement silo baghouse is limited to no greater than 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. Mattingly Products, Inc. shall take corrective action if visible emissions from the baghouse exceed 5% opacity. [MEDEP Chapter 101]
- D. PM emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101]

(18) **Rock Crushers**

- A. Mattingly Products, Inc. shall install and maintain spray nozzles for particulate control on the rock crushers and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [MEDEP Chapters 115, Chapter 101, BPT, BACT]
- B. Mattingly Products, Inc. shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT, BACT]
- C. Mattingly Products, Inc. shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the rock crushers. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT, BACT]

(19) **New Source Performance Standards for rock crushers**

- A. RC #1, RC #2, and RC #3 are subject to 40 CFR Part 60 Subparts A and OOO and Mattingly Products, Inc. shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).
- B. Mattingly Products, Inc. shall have an initial performance test performed on the rock crushing operation per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675. This consists of a certified Method 9 observation. The performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. Mattingly Products, Inc. shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a 7 day notice to the regional inspector.

(20) **Diesel Units**

- A. Generators #1, #2 and #3 shall be limited to a combined firing of 20,000 gal diesel fuel with a maximum sulfur content not to exceed 0.05% by weight, on a 12 month rolling total. Fuel records from the supplier documenting quantity and sulfur content shall be kept for compliance purposes. [MEDEP Chapter 115, BPT]
- B. Emissions shall not exceed the following [MEDEP Chapter 115, Chapter 103, BPT]:

Unit		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Generator #1	lb/hr	0.07	0.07	0.03	2.43	0.52	0.19
Generator #2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.41	0.41	0.18	15.13	3.26	1.20
Generator #3	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.49	0.49	0.21	18.13	3.90	1.44

- C. Visible emissions from Generators #1, #2 and #3 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

(21) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [MEDEP Chapter 101]

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(22) **General Process Sources**

Visible emissions from any general process source shall (including conveyor belts) not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101, Chapter 115, BPT]

(23) **Equipment Relocation** [MEDEP Chapter 115, BPT]

A. Mattingly Products, Inc. shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written notice may be sent by mail, facsimile (fax), or e-mail. Notification sent by mail shall be sent to the address below or to a Department Regional Office:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at www.maine.gov/dep/air/compliance/forms/relocation.

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

(24) Mattingly Products, Inc. shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [MEDEP Chapter 115, BPT]

(25) Mattingly Products, Inc. shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard. [38 MRSA §605-C]

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(26) **Payment of Fees**

Mattingly Products, Inc. shall pay the annual air emission license fee within 30 days of **June 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/16/2005
Date of application acceptance: 1/10/2006

Date filed with the Board of Environmental Protection: _____

This Order prepared by Jonathan Voisine, Bureau of Air Quality.